

ZANZIBAR PROTECTORATE

Medical and Sanitary Report

for the year ended

31st December, 1954

SECTION I.—ADMINISTRATION: GENERAL REVIEW

ADMINISTRATION

The Senior Medical Staff at the close of 1954 was as follows:—

<i>Designation</i>	<i>Approved Establishment</i>	<i>Actual Staff</i>
Director of Medical Services	1	Vacant
Specialist Officer	1	1
Pathologist	1	1
Medical Officers (including the Medical Officer of Health and the Officer in charge Tuberculosis Unit)	7	7
Sub-Assistant Surgeons	3	3
Assistant Medical Officers	7	7
Dental Surgeons	2	2
Matron	1	1
Sister Tutor	1	1
Nursing Sisters	10	10
Male Mental Nurse (Superintendent of Mental Hospital)	1	1
Sanitary Superintendent	1	Vacant
Pharmacist Storekeeper	1	Vacant

One Officer is at Dar es Salaam doing his pre-registration internship.

2. STAFF APPOINTMENTS, RESIGNATIONS, ETC.

Dr. J. D. Robertson, Pathologist, went on leave in April and returned in September.

Dr. A. C. Howard, the Director of Medical Services, went on leave in June and subsequently retired. Pending a new appointment Dr. R. H. Purnell, Specialist Officer, has acted as the Director of Medical Services.

Dr. G. T. Balean, Medical Officer, has acted as Specialist Officer since July.

Dr. R. J. K. Tallack, Medical Officer of Health, who had been on study leave since July last year returned in August.

Dr. D. W. Beckett, Medical Officer, who went on study leave in December, 1953, returned in September.

Mr. A. M. Pollard, Dental Surgeon, went on leave in September.

Dr. L. J. Miller, Medical Officer returned to the United Kingdom on 14th December on termination of contract.

Dr. R. C. Sood, Senior Sub-Assistant Surgeon, retired in October on completion of twenty-eight years' service in the Protectorate.

Mr. C. Baty, Superintendent, Mental Hospital, went on leave in May and returned in December.

Mr. E. H. Lavers, Sanitary Superintendent, went on leave in July prior to retirement after twenty-nine years' service in the Protectorate. Pending a new appointment the Senior Sanitary Inspector has acted as Sanitary Superintendent.

Miss V. E. M. Allen, Sister Tutor, returned from leave in January.

Miss B. M. Coveney, Nursing Sister, went on leave in May and subsequently resigned.

Miss P. E. M. Allen, Nursing Sister, went on leave in May and subsequently resigned.

Miss E. Jones, Nursing Sister, arrived on first appointment on 25th September.

Miss J. R. Mark, Nursing Sister, arrived on transfer from Aden on 1st November.

Miss B. M. Robertson, Nursing Sister, arrived on transfer from Kenya on 10th November.

Miss K. P. Rochford, Nursing Sister, went on leave in November.

Miss J. M. Saw, Nursing Sister, went on leave in November.

Miss M. M. F. Cooke, Nursing Sister, went on leave in December prior to transfer to Uganda.

Although the Department was fortunate in having had its full establishment of Medical Officers and Assistant Medical Officers, the staff position gives rise to concern; it is inadequate for providing more than the most essential services, and even the provision of these throws a heavy strain on its officers. There is no margin for leave relief and the absence of one officer means either that another has to undertake double duties or that one aspect of the Department's work has to be neglected in favour of another which is more vital. Of the seven officers who are classed as general duty officers, two are engaged whole time on special tasks (Medical Officer of Health and Tuberculosis Officer) and are not available for general duties, thus reducing the effective establishment to five; on these five falls the task of providing general medical services for the hospitals and dispensaries and relieving the special duty and specialist officers when they are on leave.

Two Medical Officers and two Assistant Medical Officers were stationed in Pemba at the commencement of the year. One Medical Officer had to be brought back to Zanzibar in March and when, later in the year, another was available for posting to Chake Chake, housing was not available. It was intended to post an Assistant Medical Officer to Mkoani, Pemba, but staff shortage prevented this being done.

Mention must be made of the retirement of Mr. E. H. Lavers, Sanitary Superintendent, after twenty-nine years' service and a tribute paid to the valuable service he has rendered to the Protectorate in preventive medicine and public health over this long period.

The loyal co-operation of all members of the Department throughout the year is gratefully acknowledged.

3. HONOURS AND AWARDS

The appointment of Mr. Charles Jonathan, Senior Orderly, Mental Hospital, to membership of the Order of the Brilliant Star, fifth class, is recorded with pleasure.

4. VISITORS

Visitors to the Protectorate included the following:—

Mr. Karl Borch, World Health Organization.

Mr. C. A. Egger, Regional Director of United Nations Childrens Emergency Fund.

Professor Heaf, M.D., F.R.C.P., Consultant in Tuberculosis to the Colonial Office.

Dr. R. Jacobson, Director of Medical Services, Basutoland.

Dr. Lumsden, M.B., CH.B., D.T.M. & H., Yellow Fever Research Unit, Entebbe.

Dr. Sinclair-Loutit, United Nations Childrens Emergency Fund.

Dr. K. Martin, M.D., D.P.H., Zonal Officer, World Health Organization.

Dr. D. Thomson, Tuberculosis Section of the World Health Organization.

5. CONFERENCES

The fifth Inter-Territorial Conference of Matrons-in-Chief, East African Territories, was held in Zanzibar from 26th to 29th May. This was the first time this conference had been held in Zanzibar. The conference was opened by the Director of Medical Services who welcomed the delegates and left them to their deliberations.

Also for the first time, the Inter-Territorial Conference of Directors of Medical Services met in Zanzibar on 29th and 30th July under the Chairmanship of the Administrator, East Africa High Commission.

6.

TRAINING OF STAFF

(a) Dr. R. J. K. Tallack, Medical Officer of Health, was successful in obtaining the Diploma in Public Health, London, thanks to the World Health Organization Fellowship awarded to him in 1953.

Dr. D. W. Beckett, Medical Officer, was successful in obtaining the Diploma in Tropical Medicine and Hygiene, England. He was also successful in obtaining the degree of M.D. at Dublin.

A locally recruited student who was sent to take a three-year course in radiography at Bristol, continued his studies during the year. Reports on his progress have been satisfactory and he should qualify in November next year.

One Assistant Medical Officer, qualified at Makerere College, who was sent to Dar es Salaam for two years' compulsory internship last year, continued his pre-registration training.

(b) The scheme for training Sanitary Inspectors at Kongwa in Tanganyika Territory proved unsuccessful. The students did not like the conditions under which they had to live and train (although these had proved satisfactory for the Tanganyika trainees), and resigned in a body. This brought to a standstill the attempt to train local candidates for the Health Department.

Later in the year a request was forwarded by Government to the World Health Organization and the United Nations Childrens Emergency Fund for assistance in establishing a school for Sanitary Inspectors in Zanzibar and this request is still under consideration. In the meantime the establishment of Sanitary Inspectors remains dangerously under strength.

(c) The training of nursing staff continued. In December twelve candidates sat the final examination for which Tanganyika kindly sent an external examiner. Ten passed, two were referred for further training.

The results were very encouraging.

7.

HOSPITALS AND DISPENSARIES

Work on the new hospital continued, and by the end of the year was well on its way to completion. Plans were considered for the design for a new Out-patient Department, the provision of classrooms and a medical store, but it will not be possible to commence operations until the old hospital is evacuated.

At Wete, Pemba, the roof of the out-patient department was renewed and the hospital redecorated. The Isolation Hospital was taken over in May.

8. The work of the hospitals was fully maintained during the year, the number of in-patients being 6,909 as compared with 6,881 in 1953. Waiting lists for patients requiring non-urgent surgery have had to be instituted at the Zanzibar hospital.

The work of dispensaries continued and expanded. These are sited to serve the major centres of population in the two islands as follows:—

Zanzibar

Kizimbani	Mwera
Makunduchi	Mkokotoni
Kizimkazi	Selem
Chwaka	Jambiani

Pemba

Mzambaraoni	Fufuni
Kinazini	Ole
Konde	Ziwani
Kengeja	

In Zanzibar, land was acquired for building two new dispensaries from Development funds. These are to be at Unguja Ukuu where building has already commenced and at Msufini where building has not yet started.

In Pemba, a new dispensary at Kengeja was built and paid for, half the cost being borne by Government and half by the local population. The dispensary was opened by the Senior District Commissioner on 30th July.

A new house for the dispenser is under construction.

A dispensary is also under construction at Chonga and another at Ukutini.

The number of patients treated in dispensaries was—

New cases	...	...	...	71,418
Re-attendances	...	...	...	125,223

9. MATERNITY AND CHILD WELFARE

These services were maintained. There were 856 confinements in government hospitals. The Makunduchi Rural Health Unit is proving successful and popular. It is staffed by two midwives and visited weekly by a nursing sister. During the year, 173 women were confined.

Building of a similar unit at Mkoani, Pemba is about to commence.

10. RAHA LEO CLINIC

This clinic is intended mainly for women and children. It has proved popular with the public and also useful in relieving some of the load on the hospital's female out-patient department.

The staff consists of one full-time woman Assistant Medical Officer, one female trained Nurse, one Hospital Ayah and one Hospital Orderly.

The attendances at this clinic during the year were 10,518.

11. SCHOOL MEDICAL AND DENTAL SERVICES

The Assistant Medical Officer in charge of the School Medical Services continued to carry out inspections when his other duties permitted. Medical inspection was also carried out at two grant-aided schools. The total number of children inspected was 293.

At the end of the day inspection cards were handed over to the Headmasters, so that pupils might receive any necessary attention as soon as possible. All children who required medical and surgical treatment were referred to hospital.

Vaccination was normally performed during the school medical inspection, but as there was an urgent demand for this service, it was necessary to vaccinate students in all rural schools and defer inspection. The number of school children and teachers who were vaccinated was 3,046.

In Pemba, apart from visits by the local Rural Dispensary Attendants, no examination of school children was made owing to shortage of staff. Special arrangements were made for the District Medical Officer to examine entrants to the Pemba girls' boarding school but none presented themselves for examination.

The school dental service was continued both in Zanzibar and Pemba.

SECTION II.—PUBLIC HEALTH

1. RETURNS

12. The total number of patients seen at hospitals and dispensaries during the last five years was as follows:—

			1950	1951	1952	1953	1954
New cases	...	...	133,216	130,522	143,090	146,168	154,680
In-patients	...	...	6,011	6,533	6,160	6,881	6,909
Total attendances	...	...	304,687	305,597	332,075	254,800	255,403
Deaths in hospital	...	...	318	357	370	372	330

The principal causes of deaths in hospitals were:—

1. Respiratory tuberculosis	...	...	...	...	...	...	18
2. Malaria	...	...	...	...	...	...	9
3. Other infectious and parasitic diseases	...	...	...	...	...	...	32
4. New growths	...	...	...	...	...	...	10
5. Anaemias	...	...	...	...	...	...	18
6. Disease of nervous system	...	...	...	...	...	...	12
7. Circulatory diseases	...	...	...	...	...	...	41
8. Respiratory diseases (excluding tuberculosis)	...	...	...	...	...	...	5
9. Alimentary diseases including intestinal obstruction	...	...	...	...	...	...	53
10. Diseases of genito-urinary system	...	...	...	...	...	...	19
11. Diseases of pregnancy and puerperium	...	...	...	...	...	...	11
12. Injuries	...	...	...	...	...	...	26

2. COMMUNICABLE DISEASES

A. Insect-borne

13. *Malaria*.—10,841 cases were notified during the year and of these 443 were treated as in-patients. There were nine deaths. The figures for 1953 were 8,075 cases including 499 in-patients and twenty deaths.

14. *Blackwater Fever*.—There were two cases during the year with two deaths.

15. *Plague*.—There has been no case of this disease for many years, but the Health Department continues the systematic trapping of rats in order to ascertain whether plague is present among the rat population. Daily tests made by the laboratory proved negative for plague bacilli.

During the year 4,162 rats were trapped. Traps were set on 170,412 occasions giving a result of 2.44 rats trapped for every 100 traps set.

16. *Relapsing Fever*.—There were no cases during the year.

17. *Yellow Fever*.—No case of yellow fever was detected during the year. The *Aedes* index in urban areas remained low.

A team from the Virus Research Unit, Entebbe, headed by Dr. W. H. R. Lumsden visited the Protectorate in August and trapped and killed specimens of the local fauna, including monkeys and *Galago* ('Komba'). These are to be submitted to examination to determine whether there is a jungle reservoir of yellow fever in the Protectorate. (It is of interest to record that Dr. Lumsden stated that some of the captured 'Komba' would be forwarded alive to Korea for use in an investigation into the aetiology of epidemic haemorrhagic fever).

In 1953, the Zanzibar Protectorate had erroneously believed that its inclusion in the African Yellow Fever Zone had been authorised. This was not so and in fact the Seventh World Health Assembly, meeting in the latter half of that year, recommended that the Protectorate remain classified as a Yellow Fever Receptive Area. As a result it became necessary to re-impose restrictions on entry to Zanzibar from the Yellow Fever Endemic Zones; and it is once again necessary for travellers to be in possession of valid yellow fever inoculation certificates.

B. Infectious Diseases

18. The following table gives a comparison of the infectious diseases notified to the Medical Officer of Health, Zanzibar for the past five years.

			1950	1951	1952	1953	1954
Chicken pox	...	...	131	53	80	75	172
Diphtheria	...	...	—	1	2	—	1
Dysentery Amoebic	...	...	89	49	38	41	23
Dysentery Bacillary	...	...	34	79	10	9	70
Erysipelas	...	...	—	1	1	2	3
German Measles	...	...	1	—	—	—	—
Leprosy	...	...	12	22	17	21	27
Measles	...	...	6	112	61	44	46
Mumps	...	...	34	49	535	35	31
Puerperal Fever	...	...	14	8	5	1	2
Poliomyelitis	...	...	1	—	1	3	1
Paratyphoid Fever	...	...	—	—	—	1	1
Relapsing Fever	...	...	1	—	—	—	—
Smallpox	...	...	—	—	1*	—	—
Tetanus	...	...	—	—	—	—	—
Tuberculosis	...	...	135	125	106	143	176
Typhus Fever	...	...	—	—	—	—	3
Typhoid Fever	...	...	11	10	5	1	6
Whooping Cough	...	...	45	16	51	35	69

*One imported case from India.

The rural dispensaries do not notify their cases and their figures are not included in this table.

19. *Smallpox*.—There were no cases reported in the Protectorate although the disease occurred in the neighbouring mainland territories.

Vaccinations were carried out at the Health Office. There were numerous passengers arriving by dhow and other boats from the adjacent territories who were not in possession of valid certificates and in all such cases vaccination was insisted upon.

Passengers arriving in ships and aircraft had their health documents inspected and those without valid vaccination certificates were vaccinated.

The following numbers of vaccinations were performed during the year:—

Zanzibar	...	...	24,320
Pemba	...	..	3,713
			<hr/>
			28,033
			<hr/>

20. *Tuberculosis*.—Institutional treatment of known cases is carried out at the Zenubbai Karimjee Hospital, Dole, at the General Hospital and, to a lesser extent, at the Walezo institution.

The total number of beds in use was about ninety-seven, most being filled nearly all the time.

All cases have first to be admitted to the General Hospital for investigations that are impossible to carry out at Dole. Cases that are considered to have a reasonable chance of benefitting from treatment are then sent to Dole. They have to return to Zanzibar from time to time for further X-ray examinations.

A number of cases too advanced for treatment were also sent to the tuberculosis ward at Walezo.

During the year, sixty-two patients were admitted to the Dole sanatorium for treatment. Of these six were re-admissions. Twenty-four patients were discharged. The number of deaths recorded was four. One patient left without permission.

In all 319 cases attended government hospitals. Admissions numbered 121 and there were 18 deaths.

There were 176 cases of tuberculosis notified in Zanzibar and 35 in Pemba. Of Zanzibar cases 104 came from the Zanzibar township and 72 from the the rural districts.

The report from Medical Officer in Charge of the Tuberculosis Unit will be found in Appendix I.

Close liaison was maintained between the Medical Officer of Health and Medical Officer in Charge of the Tuberculosis Unit as in previous years. Sanitary Inspectors were employed in the following up known cases of disease and the collection of contacts for examination. The local Welfare Society was informed of all cases to enable their staff to render any assistance found necessary on investigation.

Great credit is due to Dr. K. D. Young, the officer in charge, for the way in which he has organised and built up the Tuberculosis Service over the past few years. His impending transfer to British Somaliland will be a great loss to this Department.

21. *Leprosy*.—The Leper settlements at Walezo (Zanzibar Island) and Makondeni (Pemba) were maintained as in previous years.

Walezo

The management of the Walezo Leper Settlement was in the hands of the Roman Catholic Mission. Those who are capable of working are employed by the Mission and paid an appropriate wage.

During the year an old mud-built ward was replaced by a new stone building of permanent construction. This building can accommodate twenty-four paupers or patients.

Diaminodiphenyl sulphone has now been in use for three and a half years. Recommended courses of treatment with this drug last from six months to three years according to the stage or severity of the disease. During the year twelve patients were discharged, including four who left of their own accord. The remaining eight were discharged as cured. The criteria of cure were failure to find leprosy bacilli in nasal and skin tests and the disappearance of clinical signs of the disease. It is interesting to record that, as the news of these cures spreads, lepers began to present themselves voluntarily for treatment. Further discharges are expected in 1955.

Figures of patients treated during the year were as follows:—

Remaining on 31st December, 1953 ...	73
Admitted during 1954	29
Discharged during 1954	12
Died during 1954	2
Remaining on 31st December, 1954 ...	88

Makondeni

The administration of the settlement and physical welfare of the patients remained respectively under the care of the District Medical Officer, Pemba, and a layworker provided by the British Empire Leprosy Relief Association. This layworker supervised the work undertaken by the patients in the colony, some of whom are employed on menial work and are paid from public funds. He also travelled widely throughout the island in order to discover any patients who might still be in their villages.

A large proportion of the patients was treated with diaminodiphenyl sulphone. The work being done at Makondeni is becoming better known and patients have not the same fear of admission as they had. This is no doubt due to the successful results obtained with this drug.

The District Medical Officer visited the colony at least once a week and saw groups of patients so that each patient was seen once every month or six weeks. Extra medical attention is provided when needed.

Figures of patients treated during the year were as follows:—

Remaining on 31st December, 1953 ...	79
Admitted during 1954	22
Discharged during 1954	2
Died during 1954	5
Remaining on 31st December, 1954 ...	94

22. *Excremental Diseases*.—Six cases of typhoid and one case of paratyphoid were notified. Twenty-three cases of amoebic dysentery and seventy cases of bacillary dysentery were also notified.

23. *Schistosomiasis*.—Some attention has been focussed on the incidence and treatment of urinary schistosomiasis in the rural areas, where the number of infected school children has been a matter of concern to the Health and Education Departments.

The disease has been recognised as a problem in Zanzibar for many years. During 1937 and 1938 Dr. Alan Mozley conducted a survey from which he concluded that the most important foci of infection in Zanzibar Island were in ponds situated near Muyuni, Mtende, Mbiji, and Kombeni-Ziwani. In each case he recommended draining the ponds and providing wells where necessary as an alternative water supply. (The pond at Muyuni has been treated).

In 1950 and 1951 Dr. D. M. Blair, World Health Organization Consultant in schistosomiasis, conducted a further survey which included a short visit to Zanzibar. His findings were of the same nature as those of Dr. Mozley. He considers that eradication of vector snails on the island of Zanzibar “should be a practical proposition” though he suggests the use of molluscicides rather than drainage as the method of control for the ponds in the coral areas.

A larger number of cases of urinary schistosomiasis was reported from Donge School in 1954 than in 1953 but it is by no means certain that this represents a heavier incidence in general. In comparison, the number of cases reported from Bumbweni School was less in 1954 than in 1953.

At Donge School an attempt was made to treat all cases which showed frank haematuria and which had been confirmed by examination of the urine. The drug Lucanthone hydrochloride (“Nilodin”) was used and the children were admitted to Selem Dispensary for the recommended 3-day course. The efficiency of 80-85 per cent in *Schistosoma haematobium* infections claimed by the Expert Committee on Schistosomiasis (WHO Technical Report No. 65) was not borne out but it is thought that about 70 per cent were cured and that the symptoms were ameliorated in almost all cases.

This oral treatment is so much shorter and easier to give than other forms of treatment that it is felt that the use of the drug is worth while. Its use has therefore been started at Mkokotoni Dispensary for cases from Mkwajuni and Kinyasini Schools as in-patients, but there seems to be no reason why it should not be used for out-patients at all dispensaries though possibly it should be reserved for children.

Late in November 1954 a miracidiascope was received from Dr. D. M. Blair, and the urine of 100 school children was examined at Donge School. Miracidida were seen in twenty-four specimens, including frank haematuria in nine. The majority, though not all, of these children, use Mbiji Pond for bathing and this water seems to be the main source of infection in the neighbourhood. Many snails thought to be *Physopsis globosa* are present in the pond. In December, 1954, a consignment of these live snails was sent for identification by the Research Laboratory, Salisbury, Southern Rhodesia, and a reply is awaited.

VITAL STATISTICS

24. The Medical Officer of Health has continued to act as Registrar of Births and Deaths for Zanzibar town and the recipient of quarterly vital statistics from rural areas. The system of collection of these figures is primitive and the results correspondingly unreliable.

Estimated population of Zanzibar and Pemba at				
the end of 1953	...	...	...	277,998
Add Births	...	...	5,548	
Add immigrants	...	...	41,105	46,653
				<hr/>
Total				324,651
Deduct Deaths	...	...	3,165	
Deduct emigrants	...	...	45,286	48,451
				<hr/>
Estimated population at end of 1954				276,200
				<hr/>

25. *Births and Deaths*.—3,301 births and 1,701 deaths were recorded in Zanzibar and 2,247 births and 1,464 deaths in Pemba. The birth rate worked out at 12.9 per thousand and the death rate at 11.5 per thousand.

26. *Infant Mortality*.—Forty-eight deaths of children under one year were registered.

27. *Still-births*.—Forty-two still-births were registered.

SECTION III.—HYGIENE AND SANITATION

28. The measures for mosquito control which have been fully described in previous reports were continued throughout the period under review and there are no major changes or developments to record. Over four hundred and eighty thousand inspections of premises were carried out in Zanzibar township. Other inspections in the township exceeded four hundred and seventeen thousand, and in the protective belt seventy-nine thousand.

Notices were served on occupiers of premises where mosquito breeding or conditions suitable for breeding were discovered, and a certain number of prosecutions had to be undertaken in order to secure abatement of these nuisances. In cases where owners or occupiers of premises were not responsible, the Health Office took appropriate action by raising low-lying land, oiling, filling in holes and similar activities.

Breeding Places Found

			Zanzibar township	Protective belt outside township
Anopheles	...	...	15	90
Aedes	...	...	189	163
Culex	...	...	169	118

Adult Mosquitoes caught in Control Stations

			Zanzibar township	Protective belt outside township
Anopheles	...	...	2	6
Aedes	...	...	—	5
Culex	...	...	2,695	346
Aedes Index (per cent)	...	...	0.03	0.2

These figures do not show any substantial change from those of previous years.

LICENSED PREMISES

29. All licensed premises were inspected before the issue of new licences. The co-operation of the Municipal Officer has been of great assistance in this work. Notices are issued where the premises are found not to conform with the legal requirements.

FACORIES

30. Regular factory inspections were carried out by the District Sanitary Inspectors.

GENERAL MEASURES OF SANITATION

(a) Sewage Disposal and Drainage Improvements in Private Houses

31. The progress reported last year in converting pit latrines into water-closets has been maintained. All new buildings must be provided with modern sanitation. Fifty-three septic tanks were constructed by private owners and one hundred and forty-three flushed closet pans installed. In addition to the above installations with their connecting drain pipes, new drainage laid by the Public Works Department has enabled forty-eight cesspits and twenty-seven sullage pits to be abolished.

(b) Scavenging and Refuse Disposal

Owing partly to the continued growth of the town, and partly to inadequate supervision of the scavenging staff due to shortage of trained personnel, street-cleaning and scavenging presented great problems and it must be admitted that the cleanliness of the town did not reach the standards of previous years. The scavengers were not aided in their task by the general public. Some improvement was obtained in the last quarter of the year when a skeleton street-cleaning service was organised for work in the afternoons, and the task of the scavengers was somewhat lightened

by the arrival of a refuse lorry which went into action in November. It must be emphasized however that the town will never attain a desirable state of cleanliness until the general public co-operates more in the disposal of refuse. A force of two hundred and fifty men cannot be expected to clean up completely the litter created by fifty thousand.

Refuse was disposed of either by burning or by controlled dumping, the latter method being used to raise the level of low-lying and swampy areas. In all, over one hundred and nineteen thousand cart-loads of rubbish were removed in 1954, a considerable increase over the quantity (167,451) for 1953.

(c) Control of Flies

Seventy-one fly breeding places were detected and dealt with in the course of the year.

(d) Control of Rats

Over four thousand rats were caught, and over two thousand slides of spleen smears were examined in the Laboratory after the rats had been inspected at the Health Office. No case of plague was discovered. Of the rats and other rodents caught 3,995 were *Rattus rattus*.

HOUSING AND TOWN-PLANNING: ZANZIBAR TOWNSHIP

32. The Director of Medical Services is a member of the Town-Planning Board which is concerned with the siting and layout of new housing estates, zoning, and in certain cases with individual applications for buildings and improvements.

The day-to-day work is carried out by the Building Authority, which for the Stone Town consists of the District Engineer and the Medical Officer of Health and, for Ngambo, of the District Commissioner (Urban) and the Medical Officer of Health. The Medical Officer of Health is responsible for inspections and recommendations for building or repair, and work in hand is kept under the supervision of the District Sanitary Inspectors. Two thousand four hundred permits for building, alterations or repairs were issued.

In addition eighty-four ruinous and insanitary huts were demolished. Notices were served for unauthorised works in fifty-two cases and for dangerous structures in one hundred and fifteen cases. The work of this authority increases in volume from year to year and much praise is due to the Medical Officer of Health and his staff for their constant vigilance and tact in dealing with the large number of applications received and in the close supervision given to works in progress.

Appeal from the decision of the building Authority lies to the Building Appeals Advisory Board which advises the British Resident.

It is of interest to record that of one thousand seven hundred and seventy-six building applications submitted to the Joint Building Authority, Ngambo, one hundred and thirty-seven were refused. Of these refusals twenty-five were the subject of appeal, and of these appeals five were allowed after submission to the British Resident. This would suggest the interpretation of the Building Regulations by the Medical Officer of Health is strict and impartial and that he is not the ogre the plaintiffs of the appellants would imply.

FOODSTUFFS IN RELATION TO HEALTH AND DISEASE

33. All licensed premises dealing with food were regularly inspected and necessary improvements effected when required. In all, forty notices were served in connection with these improvement.

The following numbers of premises were registered as licensed premises:—

Eating houses	...	...	...	90
Bakehouses	...	...	...	11
Laundries	...	...	...	30
Houses let-in-lodgings	...	...	...	60
Aerated-water factories	...	...	...	8

Licensed hawkers were kept under strict supervision and one hundred and ninety-two were checked and had their utensils approved and stamped by the Health Office.

Milk inspections were regularly carried out. Nine prosecutions were instituted for milk found to be below the legal standard and nine convictions were obtained.

Foodstuffs were regularly inspected and condemned where they were found to be unfit for human consumption.

RURAL SANITATION: ZANZIBAR ISLAND

34. Trained Sanitary Inspectors were stationed at Makunduchi, Chwaka and Mkokotoni and carried out regular inspections in their districts throughout the year. In conjunction with the Rural Dispensary Attendants, they co-operated with the Tuberculosis Unit in reporting suspected cases, following up known cases, and arranging for contacts to be examined at the Zanzibar Hospital.

PEMBA

PUBLIC HEALTH IN PEMBA

35. Sanitary Inspectors were stationed at Wete, Chake Chake, Mkoani and Konde. At the end of September it was found necessary to close the station at Konde and transfer the Sanitary Inspector to Zanzibar on account of shortage of staff. Unfortunately it has not been possible to replace him. Sanitation staffs at the three major centres are under the control of the District Sanitary Inspectors but in the case of Konde they are paid by the Provincial Administration.

Anti-malarial Measures

36. These were vigorously carried out as in previous years and a large amount of bush-clearing was done. In addition much clearing of mangroves around Wete port was done with very beneficial effects, not only from riddance of mosquitoes, but also from the improvement in appearance and general amenities of the foreshore.

A campaign was undertaken to rid the three townships of banana plantations. In Wete little difficulty was experienced and with the co-operation of the Senior District Commissioner the town was completely cleared. In Chake Chake and Mkoani more opposition was encountered, possibly owing to lack of labour, and notices had to be served to compel owners to do their own clearing.

Owing to a poor and late clove crop there was much unemployment in the island from April onwards and advantage was taken of available funds to recruit extra gangs in June and October to accelerate bush-clearing and grass-cutting.

Miscellaneous Services

37. Food inspections, scavenging and destruction of vermin were vigorously carried on.

Pemba Health Advisory Committee

38. There was one meeting of this committee in the course of the year. Amongst other matters, the siting of the new dispensaries at Chonga and Ukutini was discussed and it was pointed out that the siting of dispensaries in out of the way places was an error as the usefulness of a dispensary varies directly with the number of visits which can be made by a Medical Officer.

Joint Building Authority, Pemba

39. This authority is composed of the Senior District Commissioner, the District Engineer and the District Medical Officer. Meetings were held fortnightly, and its functions are similar to those of the Zanzibar authorities. In all, 1,761 applications were considered which was a great increase on the work of previous years. The number of applications in respect of Wete was far greater than in respect of the other two towns.

Progress was made in improving the main street of Wete and several derelict houses were demolished.

SECTION IV.—PORT HEALTH WORK

ZANZIBAR

40. The Medical Officer of Health continued to be responsible for the work and once again it is a pleasure to record the courtesy and tact with which the Health Inspectors and Sanitary Supervisors carried out their duties. Theirs is an exacting task with irregular hours and much overtime work and their punctual attendance at these duties has been admirable.

The following is a record of the work performed by these sections in 1954:—

Ships which called	...	...	636
Dhows which called	...	...	1,689
Persons who arrived by sea	...	...	25,519
Persons who left by sea	...	...	29,993
Aircraft which landed	...	...	1,882
Persons who arrived by air	...	...	15,586
Persons who left by air	...	...	15,293

During the course of checking health documents the following numbers of persons were found either to be without vaccination or yellow fever certificates or to have invalid documents:—

Ships' passengers	...	...	247
Air passengers	...	...	151

These figures, which are similar to those of last year, would suggest that there is a hard core of travellers who will never learn the necessity of having these documents in their possession.

Quarantine Station

41. Routine maintenance work and bush-clearing carried out.

No person was placed in quarantine in 1954.

PEMBA

42. During 1954, one hundred and fifty-nine dhows and schooners called at Wete and 739 persons disembarked.

SECTION V.—MATERNITY AND CHILD WELFARE

13. Ante-natal and infant welfare clinics were held regularly in Zanzibar at the maternity hospital and in the rural districts of Zanzibar at Makunduchi, Mkokotoni, Mwera and Selelem. They were also held at Wete and Chake Chake in Pemba.

Figures of attendances at the various clinics are shown in Appendix II.

The Rural Health Unit at Makunduchi continues to be very popular and the number of deliveries taking place in the clinic is steadily increasing. Abnormal cases from this clinic are referred to the Zanzibar Hospital, as is the practice at Mkokotoni, Mwera and Selelem. These last three centres have no facilities for conducting confinements.

A Rural Health Unit is about to be established at Mkoani in Pemba and will greatly increase the facilities available for maternity and child welfare work in the southern part of Pemba.

Of the four hundred and forty-two deliveries which took place in the Zanzibar maternity hospital fifty-five were abnormal. There were five maternal deaths.

SECTION VI.—REPORT ON SPECIAL DEPARTMENTS

EYE CLINIC

44. The Pathologist was in charge of the Eye Clinic. The work continues to expand and is now of sufficient volume to justify the appointment of a whole-time officer to take charge of this department: it is hoped that this may be possible in 1956 when a suitable member of the medical staff has been trained. In the meantime the satisfactory running of both his departments throws a great strain on the Pathologist and inevitably both the eye clinic and laboratory services suffer to some extent and it is greatly to his credit that the two services function so well.

The following are the figures for cases treated:—

New cases	3,874
Re-attendances	14,983
Vision-testing (candidates for Government employment and school boys for scholarships) ...	740
	<hr/> 19,597
Refraction for glasses	94
Major operations	43
Minor operations	28
Cases admitted to hospital	146

SURGERY

45. Six hundred and fifty-nine major operations and one thousand six hundred minor operations were performed at the Zanzibar Hospital in 1954. As in previous years, hernia and hydroceles, many of them of very large size, were the commonest conditions for which surgery was performed. Strangulated hernia continues to be the commonest surgical emergency. Most of the commoner surgical conditions are seen and treated in the course of a year's working.

LABORATORY, ZANZIBAR

46. The total number of examinations performed in Zanzibar was 41,252.

The following is a summary of the work:—

Parasitological examinations	22,175
Bacteriological examinations	7,853
Serological examinations	2,594
Medico-legal examinations	21
Post-mortem examinations	30
General (blood biochemical etc.)	8,510
Special (Aschheim-Zondek, veterinary, etc.) ...	69

Malaria

The number of positive blood-films showed a considerable increase over those of 1952 and 1953. The comparative figures are—

	1952	1953	1954
P. Falciparum	891	1,804	1,667
P. Vivax	154	275	317
P. Malariae	5	4	5
Undefined plasmodiae ...	135	191	523

The demand from the hospital for crude liver-extract continued. This year forty-five litres were supplied as against 113 litres last year.

Preparation of sterile solutions for the Eye Clinic and the making of dilutions of old Tuberculine "T" for the Tuberculosis Clinic continued as in previous years.

LABORATORY, PEMBA

A total of 7,104 examinations was performed in Pemba and may be summarised as follows:—

Parasitological examinations	3,806
Bacteriological examinations	804
Serological examinations	377
Medico-legal examinations	2
General (blood, biochemical, etc.)	2,115

DENTAL SERVICE

47. Visits to Pemba by members of the department covered fifty days.

The following is a summary of the work done in the past year. It does not include treatment given to in-patients or medico-legal work.

	<i>Attendances</i>	<i>Extractions</i>	<i>Fillings</i>	<i>Scalings</i>
Schools	1,047	339	966	7
Out-patient clinic	7,423	8,486	—	—
Other patients	1,365	426	726	26

MENTAL HOSPITAL

48. Improvements were made to the kitchen and a new laundry was built. Out-door shelters were provided in all the four compounds, and sundry improvements were made to the Refractory wards with the object of increasing security. No major building was undertaken and there is an urgent need for more ward accommodation for both sexes.

The total number of admissions again exceeded fifty per cent of the total accommodation. This high admission rate unfortunately made it imperative to discharge patients earlier than would be desirable, and this enforced policy had an effect on the high number of re-admissions which were found to be necessary.

Increasing numbers of patients are brought to the hospital by their relatives, and it would appear that the public are becoming more conscious of the value of this hospital.

The numbers of patients treated during the year were as follows:—

Remaining on 31st December, 1953	156
Admitted during 1954	83
Discharged during 1954	64
Deaths during 1954	8
Remaining on 31st December, 1954	167

The number remaining (108 male and 59 female) is a record. "Official accommodation" exists for seventy-eight male and fifty-three female patients, so that it is plain that serious overcrowding is occurring. This is causing considerable anxiety in view of the possible consequences, in the form of epidemics, which may arise.

Electro-convulsive therapy was in use until August, when the apparatus went out of order and had to be returned to the United Kingdom for repair. Results of treatment appeared to be in conformity with those found elsewhere, in that the greatest benefit was conferred on early cases, less benefit on cases of longer duration, and little or none on long-standing cases. As a result of this experience a start has been made in treating early cases as out-patients and the preliminary results are promising.

Work on the improvement of the grounds, and the cultivation of fruit trees and ornamental shrubs continued, but the results were not encouraging owing to the poor quality of the soil. Twenty male patients were kept continuously employed in the gardens.

WALEZO INSTITUTION

49. This institution, which is under the control of the Roman Catholic Mission, has accommodation for (a) the old and infirm (b) tuberculosis patients and (c) leprosy patients.

The medical work is under the direction of the Medical Officer of Health.

The following figures show the work done during 1954:—

Poor House

Number remaining on 31st December, 1953	...	...	152
Admitted during 1954	...	...	76
Discharged during 1954	...	...	27
Died during 1954	...	...	58
Number remaining on 31st December, 1954	...	...	143

Tuberculosis Ward

Number remaining on 31st December, 1953	...	...	20
Admitted during 1954	...	...	64
Discharged during 1954	...	...	39
Died during 1954	...	...	13
Number remaining on 31st December, 1954	...	...	32

Leper Settlement

Number remaining on 31st December, 1953	...	...	73
Admitted during 1954	...	...	29
Discharged during 1954	...	...	12
Died during 1954	...	...	2
Number remaining on 31st December, 1954	...	...	88

PRISONS

50. In general the health of prisoners remained good. The incidence of schistosomiasis was high in new entrants, but symptoms responded rapidly to treatment. No prisoner suffering from active schistosomiasis is allowed to proceed to the prison camps; all prisoners employed in cook-houses are examined periodically for evidence of bowel diseases.

Chickenpox and mumps occurred throughout the year.

One hundred and thirty-one prisoners were admitted to the Prison Infirmary and 1,056 new cases were treated as out-patients. Total attendances numbered 8,680. Seventeen cases were transferred to the Government Hospital.

The daily average on the sick list was twenty-seven.

Rural Dispensary attendants at Kizimbani and Selem were in charge of Kinu-cha-Moshi, Langoni and Kichwele Prison Camps respectively. These were visited once weekly by the Medical Officer in charge of Prisons.

In Pemba, the District Medical Officer was in charge of Wete Prison and Makondeni Prison Camp. These were inspected regularly and the state of health was considered satisfactory.

DEPARTMENTAL TRANSPORT

The Medical Officer of Health remained responsible for the administration of the departmental transport during the year. This comprised three ambulances, two pickups, one refuse truck and two motor bicycles, of which one ambulance and one pickup were withdrawn from service during the year.

SECTION VII.—FINANCE

51. (a) *Expenditure, Health Department*

	£
Personal Emoluments	110,585
Other Charges:	
General Stores	6,533
Drugs, Medical Stores and Equipment	19,970
Maintenance of Patients	22,165
Sanitation Labour	21,894
Miscellaneous Services	17,752
Total ...	198,899

(b) *Revenue*

	£
Hospital fees and sale of drugs	7,569
Dental fees	473
Contribution from other territories towards Quarantine Station	1,585
Total ...	9,627

SECTION VIII.—LEGISLATION AFFECTING THE PUBLIC HEALTH
ENACTED DURING THE YEAR

52. *Medical Practitioners and Dentists Decree, 1954*

Government Notice No. 69.—The Medical Practitioners and Dentists Decree, 1954 (Date of Operation) Order, 1954.

Public Health Decree (Cap. 60)

Government Notice No. 72.—Public Health (Pemba Local Sanitary Board) (Revocation) Order, 1954.

Government Notice No. 73.—Revocation of Standing Orders for Pemba Sanitary Board.

TUBERCULOSIS UNIT

Appendix I

BUILDINGS AND EQUIPMENT

No new building has been done since 1952, but an extra room in the out-patients building at the Zanzibar Hospital has been made available for the Chest Clinic.

The equipment has been much improved by the addition of a thoracoscope, a bronchoscope and a considerable number of minor items.

STAFF

The staff of the unit has been increased by one trained hospital attendant, Mohammed Khamis Kondo, who is himself an ex-patient.

Eight orderlies have also joined the staff at Dole.

NEW CASES

There is a steady increase every year in the number of new cases of respiratory tuberculosis seen.

During 1954, two hundred and sixteen new cases were seen as follows:—

			<i>Men</i>		<i>Women</i>		<i>Total</i>
Africans	...	...	118	...	39	...	157
Arabs	...	...	22	...	2	...	24
Asians	...	...	21	...	14	...	35
			<hr/>		<hr/>		<hr/>
Total	...		161	...	55	...	216
			<hr/>		<hr/>		<hr/>

They were derived from the following sources:—

1.	Referred by Out-patients Department	...	...	...	...	100
2.	Referred by other Government Medical Officers or Medical establishments in Zanzibar	...	...	...	...	24
3.	Referred by Private Practitioners	...	...	...	...	34
4.	Referred by District Medical Officer, Pemba	...	...	...	...	15
5.	Admitted to hospital under other diagnoses	...	...	...	...	33
6.	From contacts of open cases	...	...	...	...	10

The cases came from the following places:—

(1) Zanzibar Town	...	...	...	...	139
Africans	...	...	...	...	94
Arabs	...	...	...	...	17
Asians	...	...	...	...	28
(2) Zanzibar District	...	...	...	...	55
Africans	...	...	...	...	49
Arabs	...	...	...	...	4
Asians	...	...	...	...	2
(3) Pemba	...	...	...	...	19
Africans	...	...	...	...	13
Arabs	...	...	...	...	3
Asians	...	...	...	...	3
(4) India or the mainland	...	...	...	...	3
African	...	...	...	...	1
Asians	...	...	...	...	2

The age groups were as follows:—

		<i>Africans</i>			<i>Arabs</i>			<i>Asians</i>					
		<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>
0-4	...	2	—	2	—	—	—	—	—	—	2	—	2
5-9	...	3	2	5	—	—	—	3	—	3	6	2	8
10-14	...	1	1	2	—	—	—	—	1	1	1	2	3
15-19	...	8	2	10	1	—	1	1	3	4	10	5	15
20-29	...	33	13	46	3	2	5	8	3	11	44	18	62
30-39	...	20	12	32	6	—	6	3	5	8	29	17	46
40-49	...	25	3	28	6	—	6	3	1	4	34	4	38
50-59	...	14	4	18	1	—	1	2	—	2	17	4	21
60+	...	12	2	14	5	—	5	1	1	2	18	3	21
		118	39	157	22	2	24	21	14	35	161	55	216

The severity of the disease on diagnosis is shown, using the Ministry of Health classification—

		<i>A.1</i>	<i>A.2</i>	<i>A.3</i>	<i>Total</i>	<i>B.1</i>	<i>B.2</i>	<i>B.3</i>	<i>Total</i>
Africans	...	10	3	1	14	3	20	120	143
Arabs	...	—	—	—	—	—	5	19	24
Asians	...	5	2	—	7	1	5	22	28
		15	5	1	21	4	30	161	195

New cases were disposed of as follows:—

Treated at Dole	...	...	...	...	...	56
Treated at Walezo	...	...	...	...	...	64
Treated in Hospital	...	...	...	...	...	39
Treated at home	...	...	...	...	...	9
Treated in Prison Infirmary	...	...	...	...	...	3
Treated at the Mental Hospital	...	...	...	...	...	1
Kept under supervision at the Chest Clinic	...	...	...	...	...	8
Untreated	...	...	...	...	...	36
						216

There is inevitably movement of patients from one institution to another, and the figures here refer to the main place of treatment. Many cases shown as untreated did in fact spend a few days in hospital under investigation.

DOLE HOSPITAL

Cases remaining from 1953	...	...	...	...	35
Of which (1) Died	...	...	...	...	3
(2) Left without permission	...	...	...	...	1
(3) Still in hospital on 31st Dec. 1954	...	...	...	...	7
(4) Discharged in a satisfactory condition	...	...	...	...	13
(5) Discharged in an unsatisfactory condition	...	...	...	...	10
Cases admitted during 1954 (including 6 re-admissions.)	...	...	...	...	62
Of which (1) Died	...	...	...	...	4
(2) Left without permission	...	...	...	...	1
(3) Still in hospital	...	...	...	...	33
(4) Discharged in a satisfactory state	...	...	...	...	20
(5) Discharged in an unsatisfactory state	...	...	...	...	4

Thus during 1954 a total of ninety-seven cases were treated in this 40-bed hospital.

There were seven deaths in hospital.

Two patients left without permission.

Thirty-three patients were discharged in a satisfactory condition.

Fourteen patients were discharged in an unsatisfactory condition.

Forty patients remained in hospital on 31st December, 1954.

Of the forty patients remaining in hospital—

Five were awaiting discharge in a satisfactory condition.

Ten others were progressing well.

Ten were not progressing well.

Fifteen were as yet not classified.

WALEZO

Chronic and advanced cases were sent to the tuberculosis wards at Walezo which were kept full throughout the year.

Cases remaining from 1953	...	...	...	...	20
Cases admitted during 1954	...	...	...	...	64
					—
					84
					—
Of these (1) Died	...	...	...	...	13
(2) Left without permission, taken by relatives, or discharged not improved	...	...	...	...	33
(3) Repatriated not improved	...	...	...	...	3
(4) Transferred to hospital	...	...	...	...	2
(5) Discharged quiescent	...	...	...	...	1
(6) Remaining in hospital	...	...	...	...	32
Of these, 5 are in a satisfactory condition,					

THE CHEST CLINIC

The number of cases of respiratory tuberculosis attending the Chest Clinic regularly has increased greatly.

One hundred and fifty-seven old cases attend for supervision either weekly, twice monthly or monthly.

Of these, five were diagnosed before 1950, seven were diagnosed in 1950; sixteen were diagnosed in 1951; twenty-three were diagnosed in 1952; forty-six were diagnosed in 1953 and sixty were diagnosed in 1954.

Ten cases are having refills of their artificial pneumo-thorax.

Forty-three cases are having refills of their pneumo-peritoneum.

Twenty-four cases have discontinued their collapse therapy.

Eighty cases without any collapse therapy attend for supervision.

In addition, 151 cases of chest diseases were referred from out-patients and fifty-six by private practitioners.

One hundred and seventy-nine tuberculin-positive contacts were examined, and ten found to be suffering from active disease.

COMMENT

A comparison of these figures with those of previous years shows that, besides a general increase in the number of cases seen, the average age was lower, and that more women and children were seen.

The highest number of cases seen in any previous year was 145 (in 1952) compared with 216 in 1954.

<i>Per cent</i>		<i>1930-53</i> <i>Per cent</i>	<i>1954</i> <i>Per cent</i>
Women	... ..	16	26
Children	... ..	3	6
Over thirty years of age	... ..	68	58

Figures, as far as they go, show an increased survival rate, and a much higher proportion of patients discharged in a satisfactory condition from hospital. But these figures for immediate results are of little value, and I quote two years' survival rates for 1950-52 sputum-positive cases treated in hospital:—

	<i>Africans</i> <i>Per cent</i>	<i>Arabs</i> <i>Per cent</i>	<i>Asians</i> <i>Per cent</i>
Total Number of cases	62	29	22
Number surviving two years	77	62	82
Now living a normal life	31	45	70

To sum up the present position of the Tuberculosis Unit, I will quote Professor Heaf's remark to me after his two days here. "You have got as far as you can," he said, "with what you have got."

The work has been retarded by three main deficiencies; lack of adequate staff, lack of accommodation for the chest clinic in town, and lack of X-ray facilities at Dole.

Two of these should be made good in 1955, as money has been voted for the extension at Dole, and also for equipping a chest clinic in town. Extra staff will still be urgently required.

The policy is to improve existing facilities, rather than to enlarge them, and to give priority to the development to the chest clinic. It will be noted that 64 per cent of fresh cases seen by the unit came from the town.

In 1931 a Tuberculosis Service was started in Zanzibar by Dr. Matthews. A glance through the subsequent annual reports will show how, after a year or two, interest waned until tuberculosis was dismissed as a problem of no importance. Matthews' report was obscured by an inch of dust, and nothing of his organisation remained ten years after his departure.

Appendix II

MATERNITY AND CHILD WELFARE

	1950		1951		1952		1953		1954	
	New cases	Re-attendances	New cases	Re-attendances	New cases	Re-attendances	New cases	Re-attendances	New cases	Re-attendances
General cases	11,733	31,527	13,591	41,865	14,044	50,365	16,761	38,039	17,880	58,268
Ante-natal	441	1,368	428	1,201	529	1,307	547	1,499	505	1,113
Infant Welfare	393	448	156	1,173	273	1,347	235	749	246	742
Total	12,567	33,343	14,175	44,239	14,846	53,019	17,543	40,287	18,631	60,123
<i>Zanzibar Rural Clinics:</i>										
Mkokotoni	1,215	3,856	1,389	2,768	1,639	2,868	1,502	2,335	2,109	3,037
Mwera	269	627	227	654	355	966	227	323	326	467
Selem	302	326	406	772	200	787	312	562	336	409
Total	1,786	4,809	2,022	4,194	2,194	4,621	2,041	3,220	2,771	3,913
<i>Zanzibar Maternity Hospital:</i>										
Total confinements...	399		374		431		482		442	
<i>Makunduchi Maternity Home:</i>										
Total confinements	61		89		133		160		173	
Ante-natal	106	245	204	673	233	621	243	793	260	698
Infant Welfare	201	...	521	...	463	...	653	...	562	...
Total	307	245	725	673	696	621	896	793	822	698

Pemba—Wete Clinic:

Ante-natal cases	...	154	448	225	583	233	681	287	636	259	500
Infant Welfare	...	77	304	154	239	184	307	211	224	172	229
Total	...	231	752	379	822	417	988	498	860	431	729

Pemba—Chake Chake Clinic:

Out-patients	...	3,750	8,659	4,520	6,286	4,527	6,748	4,347	8,046	5,723	9,088
Ante-natal cases	...	140	315	111	290	132	239	157	318	114	244
Infant Welfare	...	248	736	570	878	260	780	224	694	302	529
Total	...	4,138	9,740	5,201	7,454	4,919	7,767	4,728	9,058	6,139	9,861

Wete Maternity Hospital:

Total confinements...	88	147	217	210	156
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Chake Chake Hospital:

Total confinements...	56	43	73	103	85
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RETURN OF DISEASES: IN-PATIENTS, 1954

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1953	Total cases	Deaths	Remaining in Hospital at end of Dec. 1954
<i>General Infectious and Parasitic Diseases</i>						
001,008	A 1	Respiratory Tuberculosis ...	36	121	18	69
010	A 2	Tuberculosis of Meninges and Central Nervous System ...	—	6	1	—
011	A 3	Tuberculosis of Intestines, Peritoneum and Mesenteric Glands ...	—	1	—	—
012,013	A 4	Tuberculosis of bones and joints	1	4	—	1
014,09	A 5	Tuberculosis—all other forms ...	—	8	1	1
020	A 6	Congenital Syphilis ...	—	2	1	—
021.0.021.1	A 7	Primary Syphilis ...	—	9	—	2
021,2-021,4	A 7	Secondary Syphilis ...	—	8	—	—
024	A 8	Tabes Dorsalis ...	—	—	—	—
025	A 9	General Paralysis of Insane ...	—	—	—	—
022,023	A 10	Cardio Vascular Syphilis ...	—	—	—	—
026-029	A 10	All other Syphilis ...	—	13	—	1
030,031	A 11	Gonorrhoea, Genito-Urinary ...	—	54	—	1
033	A 11	Gonococcal infection of eye ...	—	2	—	—
032,034,035	A 11	Other Gonococcal infections ...	1	24	—	—
040	A 12	Typhoid Fever ...	—	12	1	—
041,042	A 13	Salmonella Infections ...	—	—	—	—
043	A 14	Cholera ...	—	—	—	—
044	A 15	Brucellosis ...	—	—	—	—
045	A 16	Bacillary Dysentery ...	1	98	7	—
046	A 16	Amoebiasis ...	2	25	4	—
047,048	A 16	Other Unspecified Dysentery ...	—	19	2	1
050	A 17	Scarlet Fever ...	—	—	—	—
051	A 18	Streptococcal Sore Throat ...	—	9	—	—
052	A 19	Erysipelas ...	—	1	—	—
053	A 20	Septicaemia and Pyaemia ...	—	—	—	—
055	A 21	Diphtheria ...	—	2	2	—
056	A 22	Whooping Cough ...	—	3	—	—
057	A 23	Meningococcal Infections ...	—	1	1	—
058	A 24	Plague ...	—	—	—	—
060	A 25	Leprosy ...	152	31	2	88
061	A 26	Tetanus ...	—	17	5	—
062	A 27	Anthrax ...	—	—	—	—
080	A 28	Acute Poliomyelitis ...	—	—	—	—
082	A 29	Acute infectious Encephalitis ...	—	1	1	—
081,083	A 30	Late effects Poliomyelitis and Infectious Encephalitis ...	—	—	—	—
084	A 31	Variola major ...	—	—	—	—
084	A 31	Variola minor ...	—	—	—	—
085	A 32	Measles ...	1	14	—	—
091	A 33	Yellow Fever ...	—	—	—	—
092	A 34	Infectious Hepatitis ...	1	21	2	—
094	A 35	Rabies ...	—	—	—	—
100	A 36	Louse-borne Epidemic Typhus ...	—	—	—	—
101	A 36	Flea-borne Endemic Typhus ...	—	1	1	—
104	A 36	Tick-borne Typhus ...	—	—	—	—
N.O.S.						
102-108	A 36	Other Rickettsial Diseases ...	—	—	—	—
110	A 37	B.T. Malaria ...	—	19	—	1
111	A 37	Qt. Malaria ...	—	—	—	—
112	A 37	S.T. Malaria ...	5	235	2	—
Carried forward ...			200	761	51	165

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1953	Total cases	Deaths	Remaining in Hospital at end of Dec. 1954
		Brought forward	200	761	51	165
115 N.O.S.	A 37	Blackwater Fever	—	2	2	—
113-117	A 37	Other Forms of Malaria	—	189	5	—
123.0	A 38	Schistosomiasis (haematobium)	—	83	—	4
123.1	A 38	Schistosomiasis (mansoni)	—	2	—	—
123.2	A 38	Schistosomiasis (japonicum)	—	—	—	—
123.3	A 38	Other Unspecified Schistosomiasis	—	—	—	—
125	A 39	Hydatid Diseases	—	—	—	—
127	A 40	Onchocerciasis	—	—	—	—
127	A 40	Loiasis	—	—	—	—
127	A 40	Filariasis (bancrofti)	3	42	1	4
127	A 40	Other Filariasis	—	20	—	—
129	A 41	Ankylostomiasis	—	51	—	1
126	A 42	Tapeworm and other cestode in- festation	—	2	—	—
130.0	A 42	Ascariasis	—	7	—	—
130.3 N.O.S.	A 42	Guineaworm	—	—	—	—
124-130	A 42	Other diseases due to Helminths	—	2	—	—
037	A 43	Lymphogranuloma Venereum	—	4	—	—
038	A 43	Granuloma Inguinale	—	—	—	—
039	A 43	Other Unspecified Venereal Disea- ses	—	12	—	—
049	A 43	Food Poisoning, infective and toxic (excepting Salmonella in- fections)	—	—	—	—
071	A 43	Relapsing Fever	—	—	—	—
072	A 43	Weil's Diseases	—	—	—	—
073	A 43	Yaws	1	29	—	1
087	A 43	Chickenpox	1	30	—	—
090	A 43	Dengue	—	—	—	—
095	A 43	Trachoma	—	1	—	—
096.7	A 43	Sandfly fever	—	—	—	—
120	A 43	Leishmaniasis	—	—	—	—
121.0	A 43	Trypanosomiasis (gambiense)	—	—	—	—
121.0	A 43	Trypanosomiasis (rhodesiense)	—	—	—	—
121.2	A 43	Other Unspecified Trypanoso- miasis	—	—	—	—
131	A 43	Dermatophytosis (Tinea)	—	—	—	—
135 N.O.S.	A 43	Scabies	—	13	—	—
036-122	A 43	Other infectious and protozoal diseases	—	3	—	—
N.O.S. 132-138	A 43	Other Parasitic Diseases	1	3	—	—
<i>New Growths</i>						
140-148	A 44	Malignant Neoplasm Mouth and Pharynx	—	—	—	—
150	A 45	Malignant Neoplasm of Oeso- phagus	—	—	—	—
151	A 46	Malignant Neoplasm of Stomach	—	1	—	—
152,153	A 47	Malignant Neoplasm of Intestine	—	2	2	—
154	A 48	Malignant Neoplasm of Rectum	—	1	1	—
161	A 49	Malignant Neoplasm of Larynx	—	1	—	—
162,163	A 50	Malignant Neoplasm of trachea, bronchus and lung not specified as secondary	—	4	—	—
170	A 51	Malignant Neoplasm of breast	—	4	1	1
171	A 52	Malignant Neoplasm of cervix uteri	—	4	1	—
Carried forward			206	1,273	64	176

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1953	Total cases	Deaths	Remaining in Hospital at end of Dec. 1954
		Brought forward ...	206	1,273	64	176
172-174	A 53	Malignant Neoplasm of other un- specified parts of uterus ...	—	1	—	—
177	A 54	Malignant Neoplasm of prostate	—	—	—	—
190,191	A 55	Malignant Neoplasm of skin ...	1	—	—	—
196,197	A 56	Malignant Neoplasm of bone and connected tissue ...	—	4	—	—
N.O.S. 155-199	A 57	Malignant Neoplasm of all other and unspecified sites ...	—	12	2	—
204	A 58	Leukaemia and Aleukaemia ...	—	—	—	—
200-203,205	A 59	Lymphosarcoma and other neo- plasm of lymphatic and haema- topoietic systems ...	—	4	2	—
210-239	A 60	Benign Neoplasms and unspecified neoplasms ...	5	37	1	1
<i>Allergic, Metabolic and Blood Diseases</i>						
250,251	A 61	Nontoxic goitre ...	—	—	—	—
252	A 62	Thyrotoxicosis ...	—	—	—	—
260	A 63	Diabetes Mellitus ...	—	30	8	1
280	A 64	Beriberi ...	—	1	1	—
281	A 64	Pellagra ...	—	—	—	—
282	A 64	Scurvy ...	—	2	—	—
286.6	A 64	Kwashiorker ...	—	—	—	—
283-286	A 64	Other Deficiency States ...	—	22	1	1
290	A 65	Pernicious and other hyperchromic anaemia ...	—	—	—	—
291	A 65	Iron deficiency anaemias ...	4	47	9	3
292,293	A 65	Other anaemias ...	2	25	9	2
241	A 66	Asthma ...	1	52	3	1
N.O.S. 240-299	A 66	Other allergic endocrine, metabolic and blood diseases ...	1	3	—	—
<i>Diseases of Nervous System and Sense Organs</i>						
300-309	A 67	Psychoses ...	156	88	9	167
310-324,326	A 68	Psychoneuroses and disorders of Personality ...	1	4	—	—
325	A 69	Mental deficiency ...	—	—	—	—
330-334	A 70	Vascular lesions affecting central nervous system ...	—	4	2	—
340	A 71	Meningitis (except meningococcal and tuberculous) ...	—	1	1	—
345	A 72	Multiple sclerosis ...	—	—	—	—
353	A 73	Epilepsy ...	—	3	—	—
370-379	A 74	Inflammatory diseases of eye ...	2	12	—	—
385	A 75	Cataract ...	—	15	—	—
387	A 76	Glaucoma ...	—	—	—	—
390	A 77	Otitis externa ...	—	7	—	—
391-393	A 77	Otitis media and mastoiditis ...	1	13	—	1
394	A 77	Other inflammatory diseases of ear	—	2	—	—
N.O.S. 341-369 395-398	A 78	All other diseases of nervous system, sense organs and audi- tory system ...	—	27	—	1
N.O.S. 380-389	A 78	All other diseases and conditions of eye ...	—	17	—	—
Carried forward ...			380	1,707	112	354

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1953	Total cases	Deaths	Remainin g in Hospital at end of Dec. 1954
		Brought forward	380	1,707	112	354
<i>Circulatory Diseases</i>						
400-402	A 79	Rheumatic Fever	—	2	—	—
410-416	A 80	Chronic rheumatic heart disease	—	3	—	—
420-422	A 81	Arteriosclerotic and degenerative heart disease	—	5	2	—
430-434	A 82	Other diseases of heart	—	43	10	1
440-443	A 83	Hypertension with heart disease	—	13	3	1
444-447	A 84	Hypertension without mention of heart	—	5	2	—
450-456	A 85	Diseases of arteries	2	—	—	—
460-468	A 86	Other diseases of circulatory sy- stem	—	41	24	2
<i>Respiratory Diseases</i>						
470-475	A 87	Acute upper respiratory infections	—	9	—	—
480-483	A 88	Influenza	—	9	—	2
490	A 89	Lobar pneumonia	5	279	19	4
491	A 90	Bronchopneumonia	2	118	11	3
492,493	A 91	Primary atypical, other and un- specified pneumonia	—	3	—	—
500	A 92	Acute bronchitis	—	52	—	1
501,502	A 93	Bronchitis, chronic and unqualified	—	31	—	1
510	A 94	Hypertrophy of tonsils and ade- noids	—	23	—	1
518,521	A 95	Empyema and abscess of lung ...	—	2	—	—
519	A 96	Pleurisy	—	15	—	—
523	A 97	Pneumoconiosis	—	—	—	—
N.O.S.						
511-527	A 97	All other respiratory diseases ...	1	29	5	—
<i>Alimentary Diseases</i>						
530	A 98	Dental Caries	—	6	—	—
531-535	A 98	All other diseases of teeth and supporting structures	1	28	—	—
540	A 99	Ulcer of stomach	—	10	—	1
541	A 100	Ulcer of duodenum	—	5	3	—
543	A 101	Gastritis and duodenitis	—	8	2	—
550-553	A 102	Appendicitis	—	20	1	2
560,561,570	A 103	Intestinal obstruction and hernia	17	451	22	8
571.0	A 104	Gastro-enteritis and colitis be- tween 4 weeks and 2 years ...	—	2	1	—
571.1	A 104	Gastro-enteritis and colitis, ages 2 years and over	—	64	2	—
572	A 104	Chronic enteritis and ulcerative colitis	—	10	—	—
581	A 105	Cirrhosis of liver	3	12	5	2
584,585	A 106	Cholelithiasis and Cholecystitis ...	—	13	3	—
536-587	A 107	Other diseases of digestive system	2	126	14	6
<i>Genito-Urinary Diseases</i>						
590	A 108	Acute nephritis	4	12	1	—
591-594	A 109	Chronic, other and unspecified nephritis	1	18	5	—
600	A 110	Infections of kidney	—	8	—	—
602,604	A 111	Calculi of urinary system	—	19	—	2
610	A 112	Hyperplasia of prostate	—	15	2	—
620,621	A 113	Diseases of breast	—	10	—	—
613	A 114	Hydrocele	1	196	—	1
Carried forward			419	3,421	249	392

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1953	Total cases	Deaths	Remaining in Hospital at end of Dec. 1954
		Brought forward ...	419	3,421	249	392
634	A 114	Disorder of Menstruation ...	2	7	—	—
N.O.S.	A 114	Other diseases of genito-urinary system and male genital organs	7	199	8	5
601-617	A 114	Other diseases of uterus and female genital organs	3	134	3	—
622-637						
		<i>Diseases of Pregnancy Puerperium</i>				
640-641, 681,682,684	A 115	Sepsis of pregnancy, childbirth and the puerperium	—	4	—	—
642,652	A 116	Toxaemias of pregnancy and the puerperium	—	6	2	—
685,686	A 117	Haemorrhage of pregnancy and childbirth	—	2	—	—
643,644	A 117	Haemorrhage of pregnancy and childbirth	—	2	—	—
650	A 118	Abortion without mention of sepsis or toxæmia	—	50	—	1
650	A 119	Abortion with sepsis	—	13	—	—
660	A 120	Delivery without complication ...	16	308	—	—
N.O.S.	A 120	Other complications of pregnancy, childbirth and puerperium ...	3	49	9	1
645-689						
		<i>Skin and Musculo-Skeletal Diseases</i>				
690-689	A 121	Infections of skin and subcuta- neous tissue	9	307	3	11
720-725	A 122	Arthritis and spondylitis ...	1	38	—	2
726,727	A 123	Muscular rheumatism and rheu- matism unspecified	—	23	—	—
730	A 124	Osteomyelitis and periostitis ...	—	17	2	—
737,745,749	A 125	Ankylosis and acquired musculo- skeletal deformities	—	1	—	—
715	A 126	Chronic ulcer of skin	40	399	4	13
700-714,716	A 126	All other diseases of skin ...	—	123	1	2
731-736, 738-744	A 126	All other diseases of musculo- skeletal system	—	66	—	—
751	A 127	Spina bifida and meningocele ...	—	—	—	—
754	A 128	Congenital malformations of cir- culatory system	—	—	—	—
N.O.S.						
750-759	A 129	Other congenital malformations ...	—	4	2	1
		<i>Diseases of Newborn</i>				
760-761	A 130	Birth injuries	—	1	1	—
762	A 131	Postnatal asphyxia and atelec- tasis	—	—	—	—
764	A 132	Diarrhoea of newborn (under 4 weeks)	—	—	—	—
765	A 132	Ophthalmia neonatorum	—	—	—	—
763,766,768	A 132	Other infections of newborn ...	—	2	—	—
770	A 133	Haemolytic disease of newborn ...	—	—	—	—
769,771,772	A 134	All other defined diseases of early infancy	—	3	—	—
773,776	A 135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	—	2	—	—
		<i>Ill-Defined Diseases</i>				
794	A 136	Senility without mention of Psy- chosis	1	29	11	1
788.8	A 137	Pyrexia of unknown origin ...	1	85	8	1
		Carried forward ...	502	5,293	303	430

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1953	Total cases	Deaths	Remaining in Hospital at end of Dec. 1954
		Brought forward	502	5,293	303	430
793	A 137	Observation, without need for further medical care	1	17	1	—
N.O.S. 780-795	A 137	All other ill-defined causes of morbidity	—	15	—	—
Injuries						
N800-N804	AN 138	Fracture of skull	—	9	4	—
N805-N809	AN 139	Fracture of spine and trunk	2	24	3	6
N810-N829	AN 140	Fracture of limbs	6	70	4	3
N830-N839	AN 141	Dislocation without fracture	—	10	—	1
N840-N848	AN 142	Sprains and strains of joints and adjacent muscle	—	14	—	—
N850-N856	AN 143	Head injury (excluding fracture)	1	21	—	—
N860-N869	AB 144	Internal injury of chest, abdomen, and pelvis	—	—	—	—
N870-N908	AN 145	Laceration and open wounds	7	174	—	2
N910-N929	AN 146	Superficial injury, contusion and crushing with intact skin surface	—	70	1	3
N930-N936	AN 147	Effects of foreign body entering through orifice	—	8	—	1
N940-N949	AN 148	Burns	1	43	5	2
N960-N979	AN 149	Effects of poisons	—	26	2	1
N950-N959	AN 150	All other and unspecified effects of				
N980-999		of external causes	4	1,115	7	4
Total			524	6,909	330	453

N.O.S. means “Not Otherwise Specified”, i.e. N.O.S. 102-108 means all other diseases included between these numbers in the International Classification to be entered in this line if not otherwise specified in any line elsewhere.

RETURN OF DISEASES: OUT-PATIENTS

Infectious and Parasitic Diseases

Code	Diseases	
001-008	Respiratory Tuberculosis	198
010-019	Other Tuberculosis	54
020-029	Syphilis	528
030-035	Gonorrhoea	1,811
036-039	Other Venereal Diseases	342
045	Bacillary Dysentery	322
046	Amoebic Dysentery	92
055	Diphtheria	1
056	Whooping Cough	286
057,340	Meningitis (excluding Tuberculosis)	—
058	Plague	—
060	Leprosy	37
061	Tetanus	3
062	Anthrax	—
071	Relapsing Fever	—
073	Yaws	9,061
080	Acute Poliomyelitis	6
084	Variola major	—
084	Variola minor	1
085	Measles	210
086	Rubella	1
087	Chicken pox	207
089	Mumps	76
092	Infectious Hepatitis	249
095	Trachoma	10
110	B.T. Malaria	422
111	Qt. Malaria	1,850
112	S.T. Malaria	1,028
113-117	Other forms of Malaria	7,098
115	Blackwater	—
121	Trypanosomiasis	1,238
123.0	Schistosomiasis (haematobium)	44
123.1	Schistosomiasis (mansoni)	22
126	Tapeworm	—
127	Onchocerciasis	—
129	Ankylostomiasis	8,845
130.0	Ascariasis	263
131	Tinea	305
135	Scabies	4,793
N.O.S.		
036-138	Other infective and parasitic diseases	434

New Growths

140-205	Malignant Neoplasms	32
210-239	Benign and other Neoplasms	316

Allergic Metabolic and Blood Diseases

241	Asthma	842
286.6	Kwashiokor	2
290-293	Anaemia	5,764
N.O.S.		
240-299	Other allergic, endocrine, metabolic and nutritional diseases	826

Diseases of Nervous System and Sense Organs

300-326	Mental Disorder	32
353	Epilepsy	1

Carried forward ... 47,652

Code	Diseases						
		Brought forward	...			47,652	
N.O.S.							
330-369	Other diseases of the nervous system and sense organs					1,063	
370	Conjunctivitis and Ophthalmia	...	...	...		2,777	
373	Stye	...	...	...	...	82	
389	Blindness	...	...	...	...	20	
N.O.S.							
371-388	Other diseases of eye (not trachoma)	...	...	...		658	
390-398	Diseases of ear and mastoid process	...	...	...		3,063	
	<i>Circulatory Diseases</i>						
400-447	Diseases of the Heart	...	...	...	...	77	
450-468	Other Circulatory diseases	...	...	...	...	509	
490-493	Pneumonia	...	...	...	...	858	
N.O.S.							
470-527	Other diseases of the respiratory system (including coryza, pharyngitis and bronchitis)	...	...	...		17,516	
	<i>Alimentary Diseases</i>						
530	Dental caries	...	...	...	...	8,731	
538	Stomatitis and other diseases of the buccal cavity	...				1,249	
560-561-570	Intestinal obstruction and hernia	...	...	...		604	
571.0	Gastroenteritis under 2 years	...	...	...	...	761	
571.1	Gastroenteritis over 2 years	...	...	...	...	1,694	
N.O.S.							
537-587	Other Diseases of Digestive System	...	...	...		8,226	
	<i>Genito-Urinary Diseases</i>						
613	Hydrocele	...	...	...	...	669	
N.O.S.							
590-617	Other diseases of genito-urinary system and male genital organs	...	...	...	...	1,824	
636	Sterility (female)	...	...	...	...	100	
N.O.S.							
620-637	Other diseases of uterus and female genital organs	...				2,353	
—	Normal pregnancy	...	...	...	...	1,235	
650-652	Abortion	...	...	...	...	54	
N.O.S.							
640-689	Other diseases of childbirth	...	...	...	...	20	
	<i>Skin and Musculo-Skeletal Diseases</i>						
690-698	Boils, and infection of skin and subcutaneous tissue	...				9,617	
715	Chronic ulcers	...	...	...	...	10,672	
N.O.S.							
700-716	Other diseases of the skin	...	...	...	...	4,827	
720-759	Diseases of bones, joints, muscles and malformation	...				4,031	
	<i>Ill-Defined Diseases and Injuries</i>						
760-776	Neonatal diseases	...	...	...	...	15	
788.8	Pyrexia of unknown origin	...	...	...	...	3,041	
N.O.S.							
780.795	All other ill-defined causes of morbidity	...	...	...	...	5,563	
N800-N839	Fractures and dislocations	...	...	...	...	163	
N840-N848	Sprains	...	...	...	...	472	
N930-N936	Foreign bodies	...	...	...	...	186	
N940-N949	Burns and Scalds	...	...	...	...	656	
N960-N979	Poisoning	...	...	...	...	13	
N.O.S.							
N.850-N999	Other injuries and wounds	...	...	...	...	9,153	
Y00-Y18	Examination	...	...	...	...	4,476	
		Total	...			154,680	
		Re-attendance	...			255,403	
		Grand Total	...			410,083	

